

Enabling Digital Transformation (DX) – a Financial Institution's Perspective

Technology, Media and Telecommunications,
Sector Solutions Group

9 November 2021



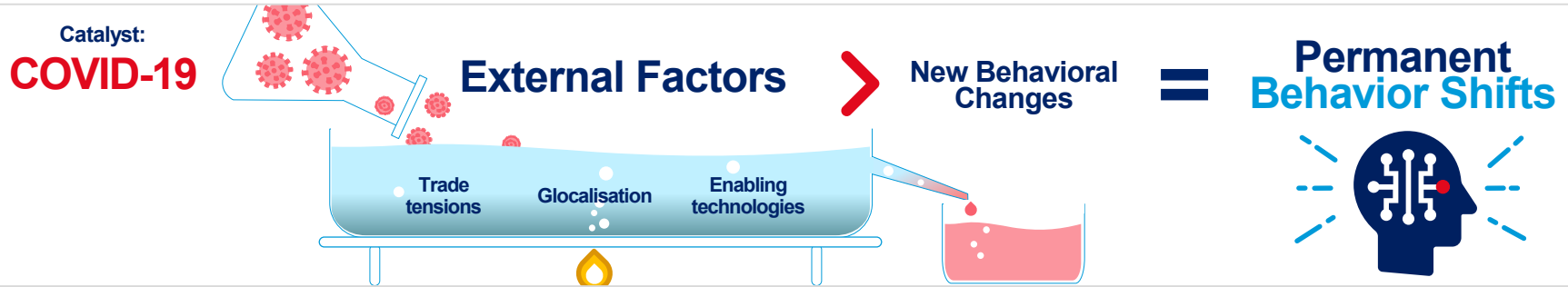
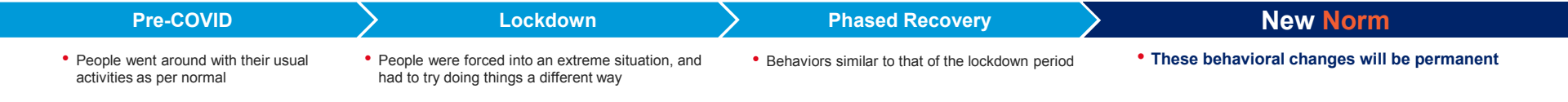
Agenda

Topic	Presenter
1. Overview of DX	Terence
2. DX and its impact on the ecosystem	Weizhe
3. Growth of As-a-Service model	Xiaohan
4. How Financial Institutions are enabling DX	Mun Hon
5. Q&A	Mun Hon

Overview of DX



COVID-19 is the catalyst to Digital Transformation



“ Singapore will have to learn to live with COVID-19 for the long term. We must all adjust the way we live, work and play. ”
PM Lee, 7 June'20

As we move into the new norm, we see the importance of Digital Transformation in 6 key areas:

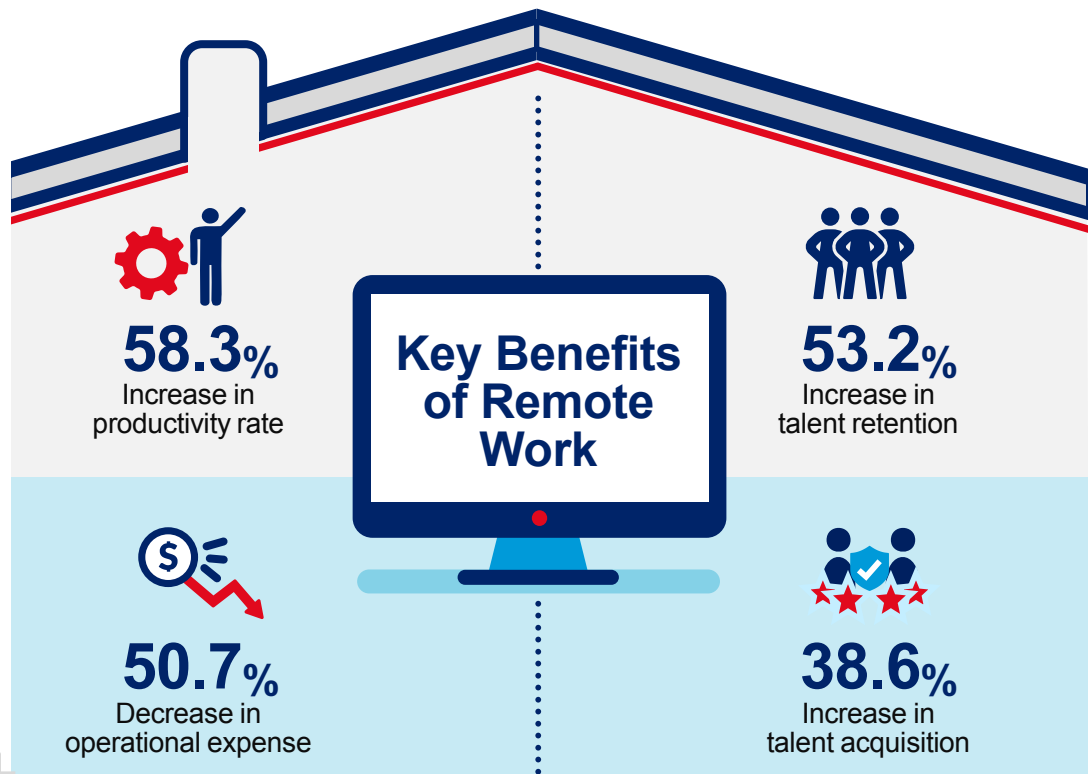


There is increased demand for remote work; and organisations are moving towards this

1 **9 in 10** employees in Singapore want to continue working from home
ST Survey

2 **Over 70%** of companies looking at flexible working as a priority
Mercer

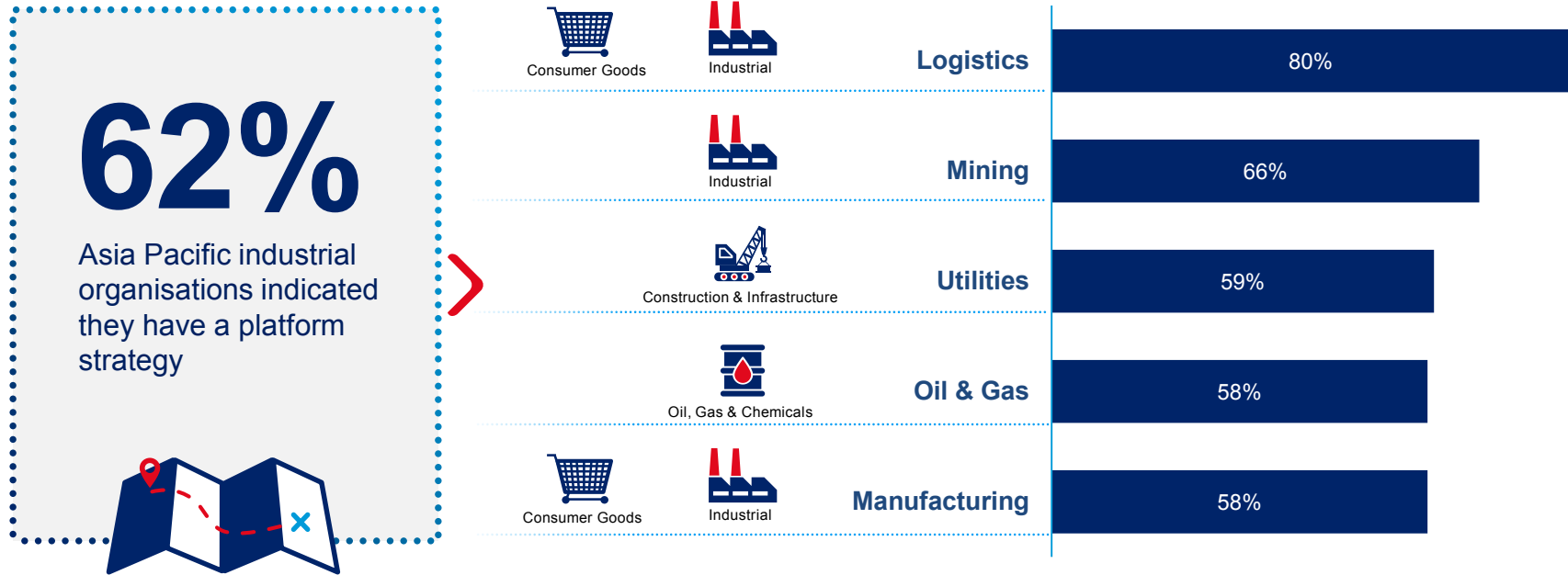
3  **WFH will be added to HR Policies**
IDC Survey



Source: IDC COVID-19 Impact Survey Wave 9, 1 Aug 2020 (N=305 -500+ Employee Size)

DX is relevant across all sectors

More organisations across all sectors are starting to adopt a DX strategy.



Source: IDC Asia/Pacific Industry 4.0 Survey, May 2020

n=420, n(Asia/Pacific Manufacturing) = 130, n(Asia/Pacific Mining) = 51, n(Asia/Pacific Oil & Gas) = 96, n(Asia/Pacific Logistics) = 40, n(Asia/Pacific Utilities) = 103

Top Technology priorities for organisations are related to DX

TOP 10 Technology Investments in 2020

“These investments enable business resiliency and help drive digital transformation,”

Sandra Ng, Group Vice President for ICT Practice at IDC Asia/Pacific



1. Remote Learning/training
2. Secure Application Delivery
3. Data Security
4. Virtual Workspaces
5. Videoconferencing
6. Collaborative Applications
7. Secure Remote Access
8. Mobile Devices
9. Workforce Performance Management
10. As-a-Service model

Implementation Priorities of Organisations

According to a survey done in August, the implementation priorities of organisations to improve businesses also relates to **IT investments that can improve the DX process.**

41.2%



Increase in IT technology investment

39.4%



Improve IT visibility and remote management capabilities

34.1%



Allow work flexibility via a hybrid remote work/return to workplace model

33.3%



Accelerate automation and artificial intelligence to remove physical workplace dependency

30.9%



Implement site safety policies to promote physical distancing and proximity tracing

27.6%



Improve remote work experience

Importance of getting on the DX roadmap fast: 4 key benefits

1 Process Improvement to Drive Efficiency

Remote work can lead to **58% increase in productivity rate**



- By reducing manual processes through e-invoicing, transactions are now updated and error-free. Employees can also focus more on business development as well as upcoming solutions



- Investing in a Self Renewal Kiosk Machine allowed employees to spend time on giving a fairer valuation for items instead of administrative work

3 Flexibility to Increase Productivity



- More than 90% of organisations have said that productivity has remained the same or even increased during this remote working period
- Companies have reduced their office footprint moving towards a hot desk system, with the goal that this flexibility can be used to drive productivity

2 Increase Savings and Improve Revenue Growth



Achieved a **payback period of 9 months** by investing in a DX process

96% ROI



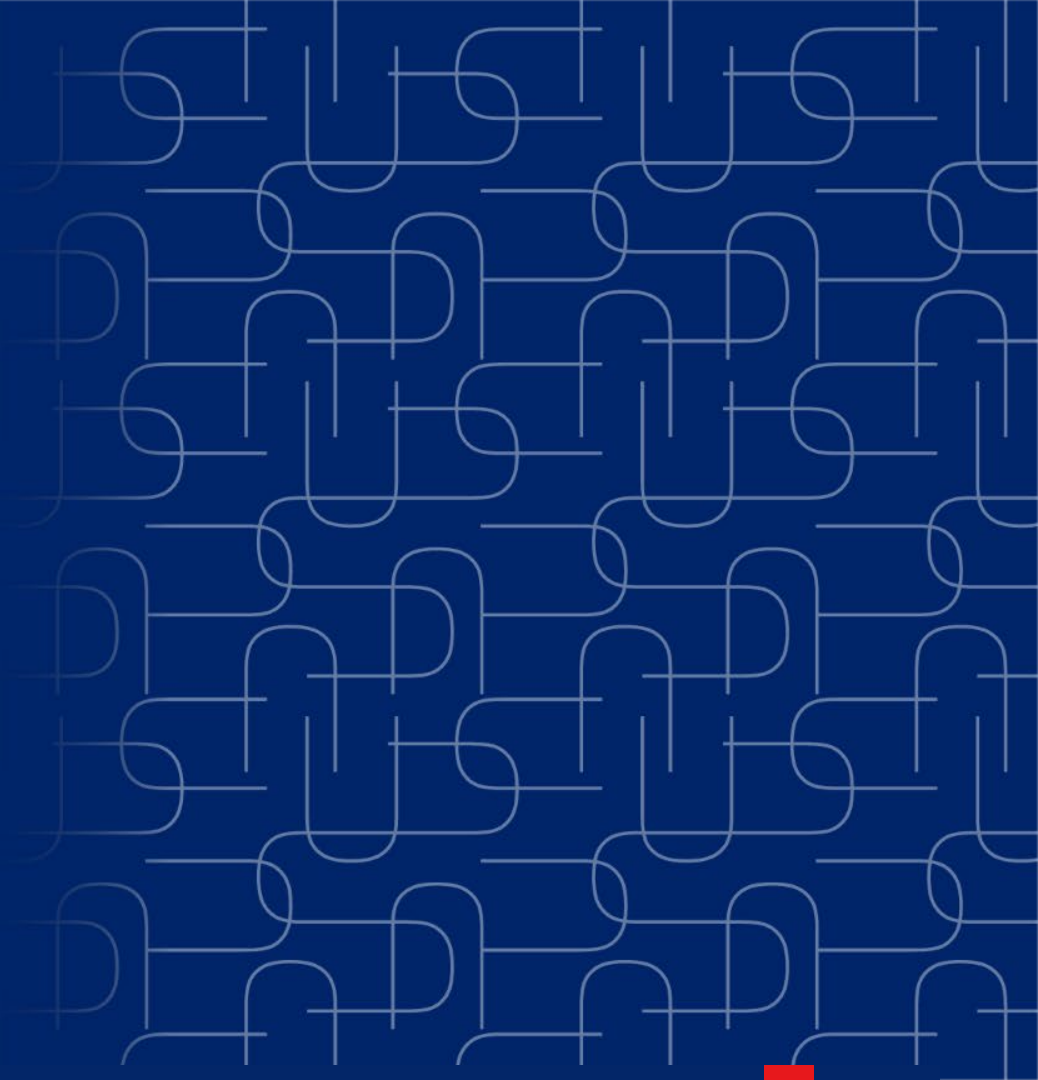
4 Drive Sales



Seonggong

- Sales increased **tenfold** after it launched a new website along with a new e-payment and online ordering system
- Delivery business boosted by **20 per cent** with a new payments and orders management solution

DX and its impact on the ecosystem



“Unpacking” Digital Ecosystem

B2B/ B2C Digital Player Platforms



Supporting Applications

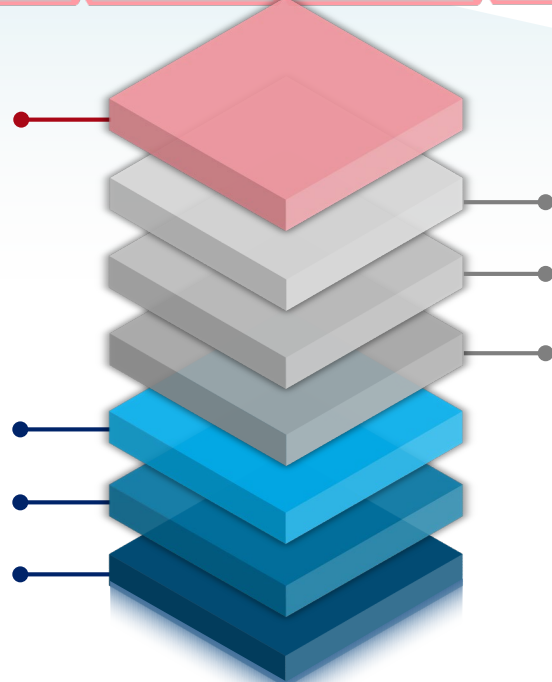
- B2B applications supporting the digital players in terms of analytics and operations
- Expense likely to be largely manpower and R&D centric, to power development and maintenance requirements
- Income on a “Pay Per Use” model or “Pay as you use” model

Digital Infrastructure

- Covers infrastructure and physical assets within stack
- Asset requires significant upfront capex layout with fixed periodic service revenue over an extended period
- Target names: Telcos, Network operators and Carrier neutral DC operators

Third Party Applications

Data & Computing Equipment
Network Connectivity
Datacenters



Cloud Operating Stack

- Main components making up public/private cloud environment part of the stack
- Largely software/ applications focused, while hardware equipment may/may not be included based on cloud operator model
- Upfront capex/ R&D expense significant, but might not be as large as required under Digital Infrastructure
- Financing might be more targeted towards working capital cycle financing requirements

Legend

- Hardware related
- Cloud related
- Digital related

Understanding the focus of Digital Transformation

The focus of companies within digital ecosystem is to provide the best user experience to their end customers, be it individual consumers or enterprises.

Focus on Transforming User Experience



Selling Services instead of Products

End customers of digital and cloud players prefer the “as a service” model when purchasing digital goods and capabilities, as it allows them flexibility in terms of scale and costs, while still allowing them access to the tools when required.



Being part of the Ecosystem

Digital and cloud players tend to offer one to a few services/ products to their customers, which might not be able to meet all their customers’ needs. Hence, these players tend to collaborate with complementary digital players to provide a larger and more comprehensive value proposition to their customers.



Data Connectivity Strategy to Plug In

A key aspect of digital infrastructure is how to connect applications, or parts of applications, when some will be running in the core, some at the edge and some in the public cloud. As organization increasingly connect digitally, their partners also need to be able to do so with minimal friction.



“
Digital transformation is key to transforming user experience
”

IT Enablers key to supporting the key players expanding in the region and the growth of DX



Increased geopolitical tensions and the acceleration of DX

Led to the increased demand for ITSP players/ IT Enablers – Key backbone supporting this strong demand

SaaS and Cloud Software Vendors seeing good growth overall

Key Highlights

IT Enablers



Microsoft

US\$30.5 bn
+41% YoY



Google

US\$9.3 bn
+35% YoY



Salesforce

US\$18.1 bn
+20% YoY

SaaS and Cloud Software Vendors



SAP

US\$8.0 bn
+20% YoY



AWS

US\$8.7 bn
+30% YoY

Global revenue in 2020:

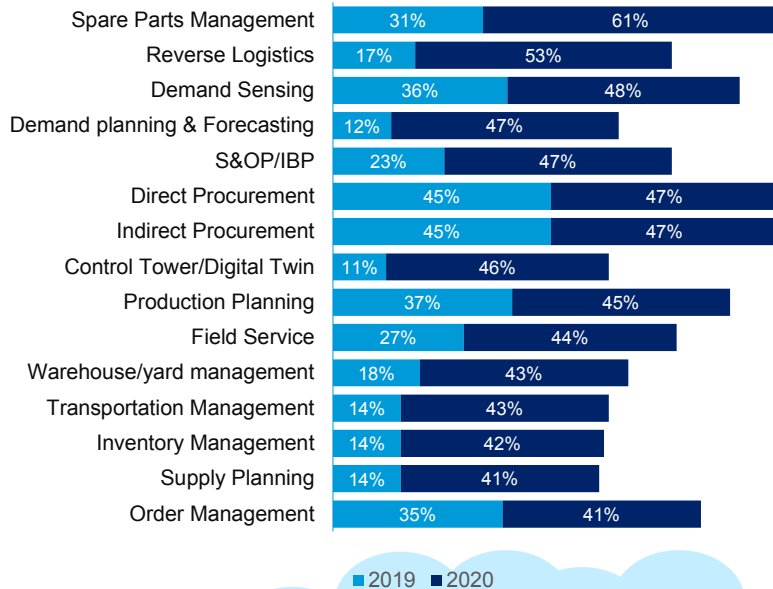
US\$245.2 bn +22% YoY

- Disruption caused by pandemic gave businesses the motivation to accelerate DX efforts
- Cloud collaboration software that almost immediately had to adjust to huge spikes in usage. Zoom, Teams, and Google Meet quickly evolved to address unforeseen increases in usage
- Microsoft earned an impressive 41% year-on-year growth, an increase of 4% over 2019, with sizable contributions from Dynamics 365 and Teams-powered Microsoft 365

Growth of As-a-Service model

Cloud continues to be a key focus for enterprises

Plans to be in the Clouds within the next 12 months



Key focus areas of Cloud Technologies



1

Enterprise Resource Management

2

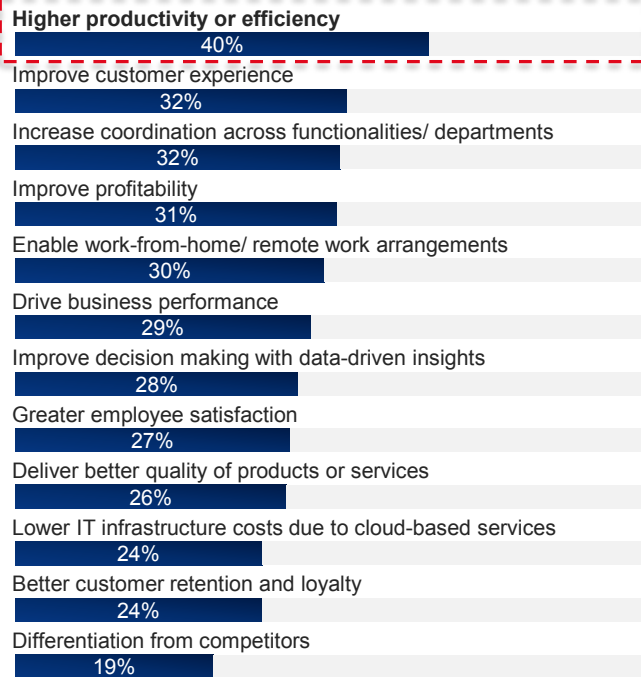
Customer Relationship Management

3

IOT Device Management

Digitalisation has greatest positive impact on productivity. 3 in 10 have benefited with increased profit

Positive impact of digitalisation: among SMEs who have adopted digitalisation



How Much Has Your Profitability Improve By?



More than 50 per cent	2%
30-40%	16%
20-30%	36%
10-20%	35%
0- 10%	11%

Positive Skews (Top 2 box):

- Largely comparable by industries. SMEs in tech, media and telecom most benefited from Lower IT infrastructure costs
- WFH positively impacted smaller SMEs (less than 10 employees or SGD <1m turnover)
- SMEs with largest revenue (SGD 50-100m) claim digitalisation has positively impacted business performance, employee satisfaction, lower IT cost and customer loyalty

D2A: What impact has digital adoption had on your company? Base: Adopted digitalisation (588)

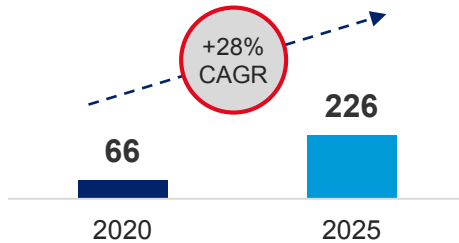
D2C: How much has your profitability improved by? Base: Those who selected improve profitability (184)

Source: UOB SME Outlook 2021 Study

Cloud IaaS an important enabling component for the future of Digital Infrastructure

Public cloud Infrastructure-as-a-Service (IaaS) market saw double-digit annual growths in 2020 amidst the pandemic, well positioned to help enterprises achieve data growth, growth in digital business and post pandemic workload requirements.

Worldwide Public Cloud Infrastructure as a Service Revenue (US\$B)



- The public cloud infrastructure-as-a-Service (IaaS) market revenue grew 33.8% in 2020 to \$66 billion
- Public cloud IaaS solutions are critical to modern digital enterprises
- Timely access to innovative infrastructure resources will be important to sustain the adaptive, resilient, secure, and compliant digital business models of the future



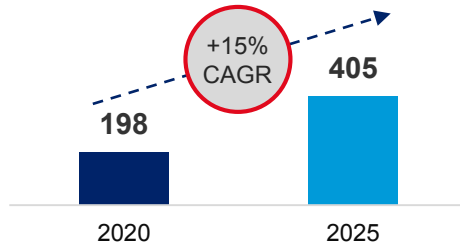
IDC predicts that by 2022, almost half of an enterprise's products and services will be digital or digitally delivered, increasing the business' reliance on infrastructure (compute, storage, networking) to support more than traditional business applications.

Definition of public cloud IaaS: public cloud IaaS as the aggregate of compute, raw ephemeral and persistent storage capacity, and the associated network capability, delivered through a public cloud deployment model

Source: Worldwide Public Cloud Infrastructure as a Service Forecast, 2021-2025, IDC

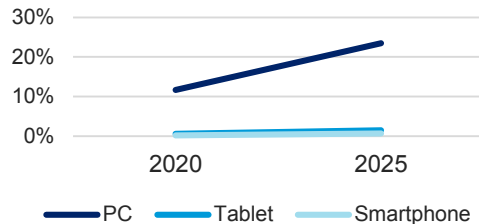
COVID-19 spurred the increase of SaaS and DaaS adoption

Worldwide Software-as-a-Service Revenue (US\$B)



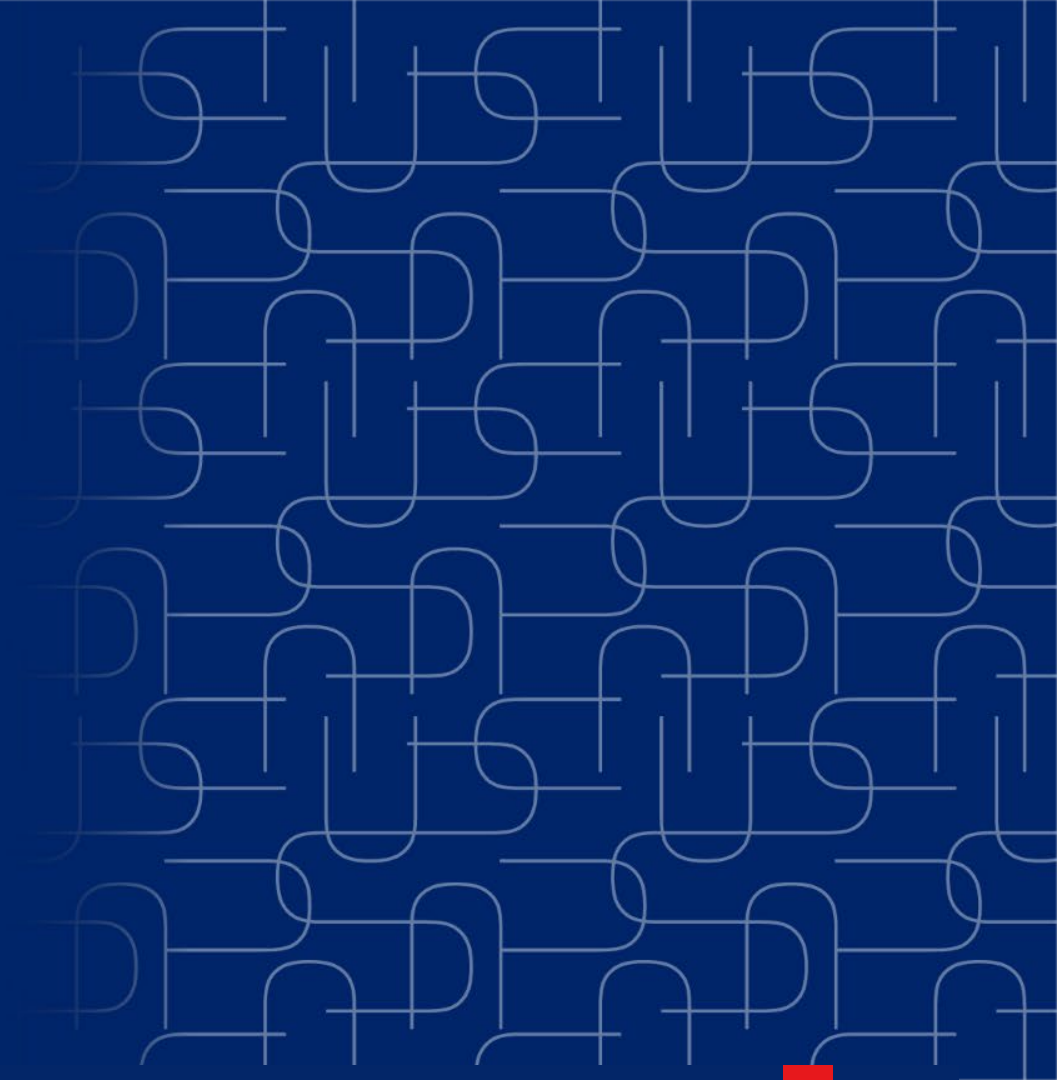
- COVID-19 increased Software-as-a-service (SaaS) adoption to support accelerated DX timelines. As a result, the CAGR for SaaS apps in the next five years is at 15%
- 65% of global GDP will be digitised by 2022, digitally determined businesses are more resilient and will be better prepared for disruption
- Globally, businesses rely on SaaS and cloud software to accelerate digital transformation

DaaS Share of Device Shipments



- DaaS results in more flexibility and utility for employees; with share of DaaS being higher in the PC market
- PCs are still more popular amongst enterprises under DaaS

How FIs are enabling DX



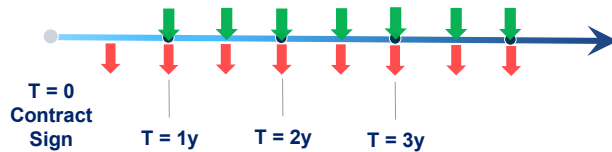
Deep dive into IT Service Providers: Two types of Cash flows

WHEN

- **Maintenance & Support** Phase of Projects
- **Business Process Outsourcing (BPO) Services** fixed fees or activity-based contract

CHARACTERISTICS

- Long term contract (1-10 years) **with recurring, steady cash flows**
- **Delayed payment is common**
- **Standard recurring tasks and Service Level Agreement (SLA)**; performance risk is relatively low

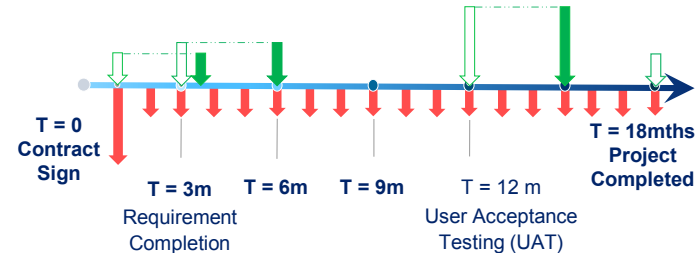


Legend:  Invoice date  Cashflow in  Cashflow out

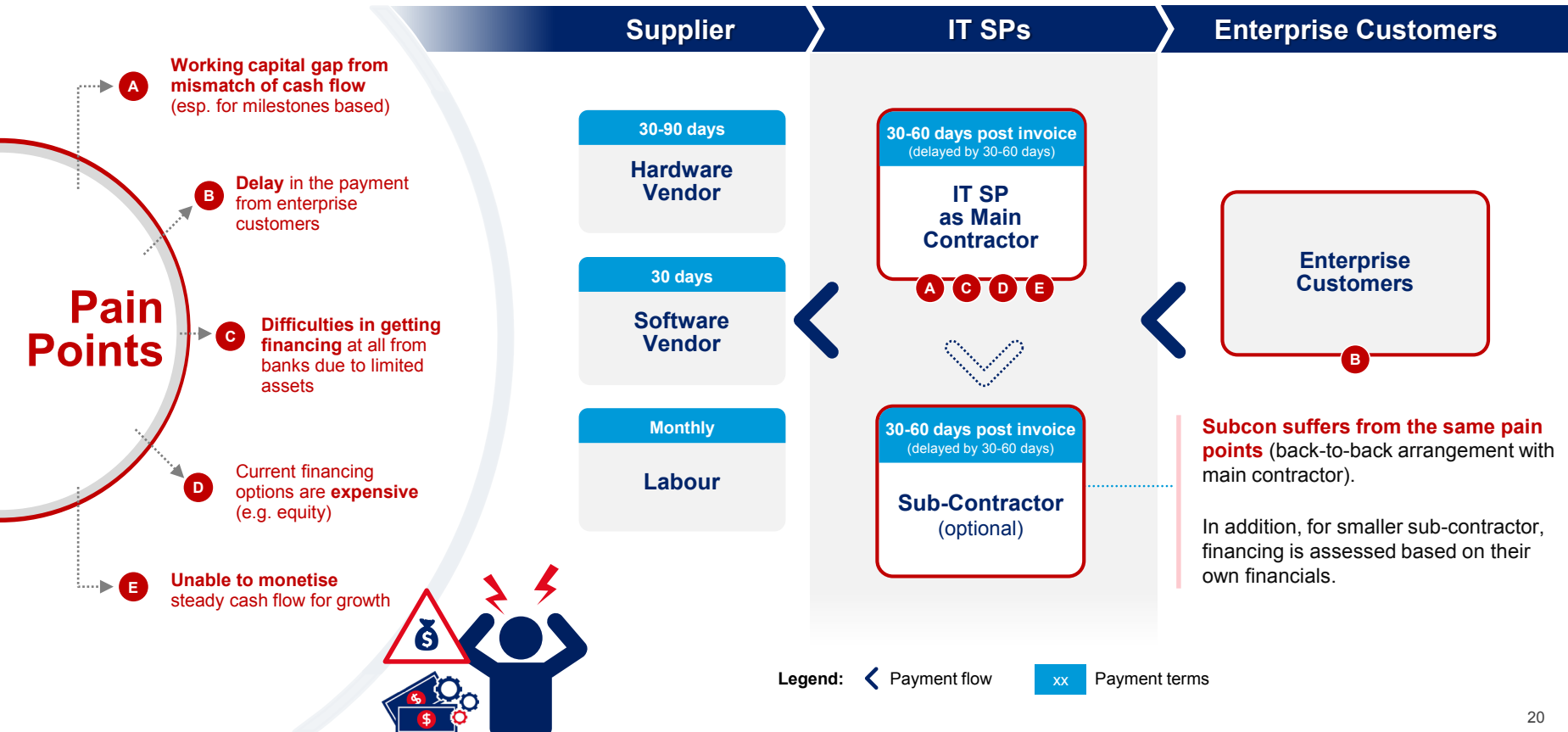
Milestone-Based Cash Flows

- **Project-oriented services**
- **BPO Services value-based** contract

- Shorter term contract (0.5-3 years) with **milestone-based cash flows**
- **Delayed payment is common**
- **Customized SLA; performance risk is present**

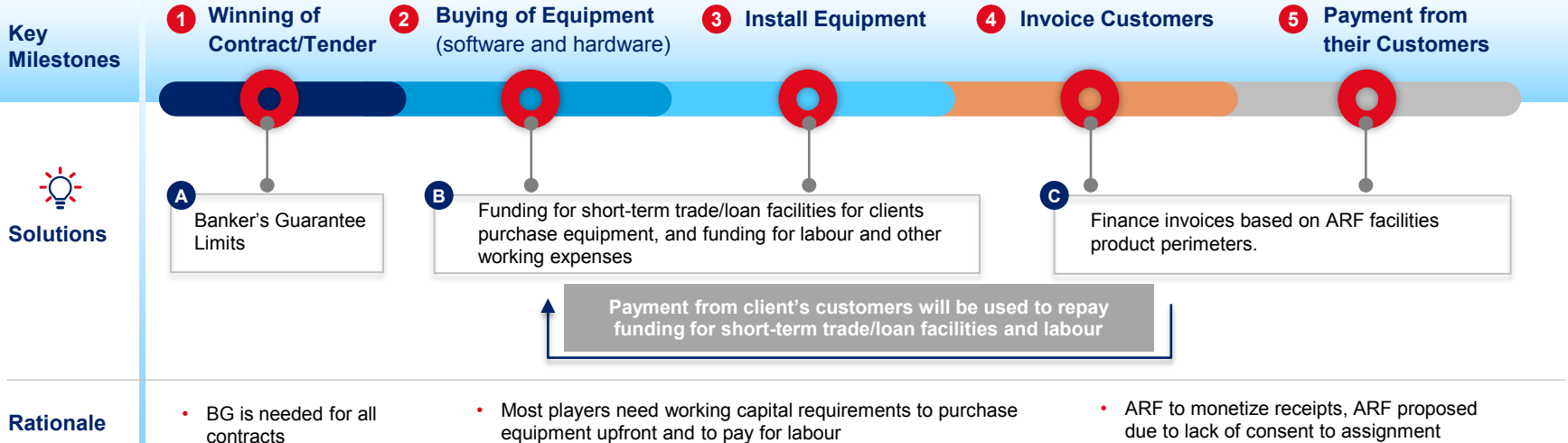


Pain points of IT Service Providers

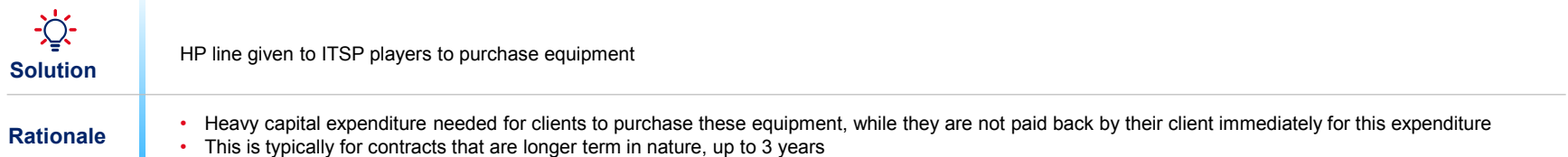


Supporting DX through companies' project life cycle

1. Contract Financing for Short-Term Contracts



2. HP Lines for Long-Term Contracts





Details	Criteria
<p>1. Contract Financing facilities comprising:</p> <ul style="list-style-type: none"> • ARF – up to 80% financing on specific existing contracts • Cash-backed BG/LC issuance for new contracts 	<p>✓ Annual Turnover of up to S\$[50] million per annum</p>
<p>1. Contract Financing facilities comprising:</p> <ul style="list-style-type: none"> • Omnibus lines of BG, MML/Short-term loans, LC/TR lines, with sub limits per contract of up to 50% of the entire contract's value • ARF – up to 80% financing on specific existing contracts <p>2. Hire Purchase</p>	<p>✓ Annual Turnover of more than S\$[50] million per annum</p>
<p>Applicable as Green enhancement for DX Basic and Plus Packages</p>	<p>✓ Underlying asset must be green</p>

Client A



Contract financing solution to support their purchase of storage equipment for an agency

Client B



Contract financing solution to support their installation work with a network operator

Client C



HP lines for client to purchase network equipment for them to lease to a telco

Disclaimer



This presentation does not constitute a recommendation by United Overseas Bank Limited and its subsidiaries, affiliates, connected or related companies, directors, employees ("UOB") to enter into any transaction or any form of commitment by UOB to enter into any transaction. UOB has not taken any steps to ensure that the product is suitable for any particular investor and unless UOB otherwise agrees, UOB is not acting as your adviser or in any fiduciary capacity in respect of any proposed transaction in relation to the above product, or any other transaction. Nothing herein constitutes investment, legal, accounting or tax advice, or a representation that any investment is suitable for or appropriate to your investment objectives, financial situation and particular needs, or otherwise constitutes a personal recommendation to you. This presentation does not purport to identify or suggest all the risks or material considerations which may be associated with the proposed product. As such, it is recommended that before entering into any transaction, you should take steps to ensure, without reference to UOB, that you have a full understanding of the terms, conditions and risks thereof and are capable of and willing to assume those risks in the light of your own investment objectives, financial situation and particular needs. If you are in doubt as to any aspect of any transaction in respect of the above product, please consult your own legal, regulatory, tax, business, investment, financial and accounting advisers. While based on information believed to be reliable, this document and its contents are provided on an "as is" basis. UOB does not make any representation or warranty as to the accuracy or completeness of the information contained in this document.

UOB or its clients may have an interest in the above product or its related products or other financial instruments, or derivatives (collectively, the "Products") including, in relation to the Products, marketing, dealing, holding, acting as market-makers, performing financial or advisory services, acting as a manager or co-manager of a public offering. UOB may also have alliances, contractual agreements, or broking, investment banking or other relationships for the provision of financial services, with any product provider mentioned in this document.

Any forecast on the economy, stock market, bond market and economic trends of the markets provided is not necessarily indicative of the future or likely performance of the securities/instruments. Whilst the information contained herein has been compiled from sources believed to be reliable and we have taken all reasonable care to ensure that the information contained in this publication is not untrue or misleading at the time of publication, we cannot guarantee and we make no representation as to its accuracy or completeness, and you should not act on it without first independently verifying its contents. The securities/instruments mentioned in this publication may not be suitable for investment by all investors. Any opinion or estimate contained in this report is subject to change without notice. We could not give full consideration to and could not make full investigation of the investment objectives, financial situation or particular needs of the recipient or any class of persons, and accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the recipient or any class of persons acting on such information or opinion or estimate. This publication may cover a wide range of topics and is not intended to be a comprehensive study or to provide any recommendation or advice on personal investing or financial planning. Accordingly, they should not be relied on or treated as a substitute for specific advice concerning individual situations. Please seek advice from a financial adviser regarding the suitability of any investment product taking into account your specific investment objectives, financial situation or particular needs before you make a commitment to purchase the investment product UOB may at any time make markets in the securities/instruments mentioned in this publication and together with their respective directors and officers, may have or take positions in the securities/instruments mentioned in this publication and may be engaged in purchasing or selling the same for themselves or their clients, and may also perform or seek to perform broking and other investment or securities-related services for the corporations whose securities are mentioned in this publication as well as other parties generally.

The presentation containing indicative terms is for information and discussion only. It shall not constitute acceptance or offer, solicitation of an offer, request or recommend of any deal.

The information contained herein is provided to you by UOB on a strictly confidential basis and you agree that it may not be copied, reproduced or otherwise distributed by you without the prior written consent of UOB.

Thank You



RIGHT BY YOU